ATTORNEY DOCKET NO.: 040894-5715

Application No.: 09/955,105

Page 3

IN THE SPECIFICATION:

Please replace the paragraph starting at line 12 of page 6 with the following rewritten

paragraph:

-- The invention is a basic model that utilizes external databases and aims at optimization

of various parameters of an image forming apparatus. For example, as shown in Fig. 1, an image

forming apparatus management system comprises: a client machine 2 (2(1) to 2(j)) adapted to

issue a job instruction including a job condition; an image forming apparatus 1 (1(1) to 1(i))

having a parameter adjustment unit, the image forming apparatus 1 being set a value of a

parameter in accordance with the job instruction; a host server 4 having an external database 5

storing a plurality of values of the parameter corresponding to predetermined job conditions,

respectively; and a client server 3 connected to the client machine 2, to the image forming

apparatus 1, and to the host server 4, the client server 3 enabling to communicate with the host

server 4 mutually, wherein the client server 3 transmits [[a]] an external parameter request to the

host server 4 and transmits a value of the parameter transmitted from the host server 4 to the

image forming apparatus 1; and the host server 4 retrieves a value of the parameter meeting the

job condition from the external database 5 to transmit the retrieved value of the parameter to the

client server 3 in response to the external parameter request. --

1-WA/2465993.1

ATTORNEY DOCKET NO.: 040894-5715

Application No.: 09/955,105

Page 4

Please replace the paragraph at lines 9-10 on page 15 with the following rewritten paragraph:

-- Fig. 7A is an explanatory plan view showing outline of sheet supply apparatus <u>730</u> used in the embodiment 1. --

Please replace the paragraph starting at line 2 of page 17 with the following rewritten paragraph:

-- The client machine 12 is, for example, a PC or workstation. A print job instruction from the client machine 12 is transmitted to a predetermined image forming apparatus [[12]] 13 via a client server 14. --

Please replace the paragraph starting from line 5 on page 35 with the following rewritten paragraph:

In this embodiment, as shown in Fig. 14, the external database 603 has selection items
(external database selection items) including manufacturer of paper (AAAAA,
BBBBB), brand (aaaaa, bbbbb), and basis weight (90 gsm, 80 gsm.
), and assigns nip pressure of the skewed roll, air blower ON/OFF, and transfer
voltage value for the secondary transfer roll, all of which are optimized, to each of selection
items as external parameters

Please replace the paragraphs starting from line 3 of page 37 to line 13 of page 41 with

the following rewritten paragraphs:

- A series of print jobs will be described referring to the processing shown in Figs. 9

through 12.

Assuming that, in the user environment 10 shown in Fig. 2, a client prepares a document

on a client machine 12(1) and executes print jobs to print the document, for example, by image

forming apparatus 13(1).

It is necessary for the client, as shown in Fig. 9, to prepare a document on the client

machine 12(1) (S9-1) and to create a print job instruction (S9-2) to make the image forming

apparatus 13(1) perform print jobs (S9-3).

The print jobs are may include selection of the image forming apparatus to be used (in

this example, the image forming apparatus 13(1)) (S9-2a), number of copies (S9-2b), print mode

setting (for example, color or monochrome) (S9-2c), paper size setting (user-specified value 321

or automatic detection 322) (S9-2d), selection of paper (S9-2e), and the like.

In particular, concerning the selection of paper (S9-2e), selecting operation is made about

either to use the external database 603 (see Fig. 8; S9-2e') stored in the storage device 17 or to

use an internal database (S9-2e'') provided in advance (for example, built into the storage of the

image forming apparatus 13 in this example) is used in the maker environment 15 shown in Fig.

2.

Assuming that the client creates a print job instruction with operation of the mouse 311

on a display screen 310 of the client machine 12 (12(1) in this example), a message "Do you

wish to use an external database?" and selection items "Yes" and "No" are displayed on the

1-WA/2465993.1

display screen 310 when the client creates a paper selection instruction, for example as shown in Fig. 13 (S10-1 in Fig. 10).

When "No" is selected at S10-1, there displays a OHP film selection button 323, a basis weight selection button for each step 324, a coated paper selection button 325, and a non-coated paper selection button 326, for example, as type of paper (S10-8). Selecting at least one of the selection buttons assumes paper selection using an internal database.

On the other hand, selecting "Yes" in response to the message "Do you wish to use an external database?" (Yes at S10-1) causes the client machine to notify the client server 14 of this selection. The client server 14, which receives this notification, requests external parameters from the host server 16 (S10-2; S11-1).

The host server 16 checks whether the external database 603 has been updated as shown in Fig. 11 (S11-2; and S10-3 in Fig. 10). In case that the external database 603 has been updated since the last external parameter request time and date by the client server 14 (Yes at S11-2), the host server 16 transmits external database selection items (manufacturer of paper, brand of paper and basis weight of paper in this example) to the client server 14 (S11-3). In case that the external database 603 has not been updated (No at S11-2), the host server 16 notifies the client server 14 that the external database 603 has not been updated (S11-4).

In case that the external database 603 has been updated (Yes at S10-3), as shown in Fig. 10, the client server 14 causes the client machine 12 to display message "The external database is updated" (S10-4). The client server 14 reads the external database selection items from the host server 16 and causes the client machine 12 to display the selection items (see Fig. 13).

In case the external database 603 has not been updated, as shown in Fig. 10, the client server 14 causes the client machine 12 to display the last external database options stored in the client server 14.

In this state, when the client selects a paper item, which the client intends to use, from the external database selection items displayed on the client machine 12, the client server 14 transmits the paper item selected to the host server 16 according to the operation instruction from the client machine 12 (S10-5).

The client server 14 receives the environment information of the image forming apparatus 13 (13(1) in this example), that is, temperature and humidity, to transmit the environment information to the host server 16, for example, at a timing when the client server 14 transmits the paper item selected to the host server 16 (S10-6).

When the host server 16 receives the selected paper item from the client server 14 (Yes at S11-5) and receives the environment information of the image forming apparatus 13 (13(1) in this example) from the client server 14 (S11-6), the host server 16 then retrieves optimum external parameters from the external database 603 based on the selected paper item and the environment information (S11-7) and transmits the retrieved external parameters to the client server 14 (S11-8).

The client server 14 receives the external parameters from the host server 16 (S10-7). For example, if the client machine 12 has already issued the print job execution instruction, the client server 14 automatically transmits the external parameters to the image forming apparatus 13. When the client machine 12 issues a print job execution instruction (S9-3) in a state where the client machine 12 has issued an operation instruction to use an internal database, the client

ATTORNEY DOCKET NO.: 040894-5715

Application No.: 09/955,105

Page 8

server 14 notifies the image forming apparatus 13 of the use of parameters of the internal

database.

From the image forming apparatus 13 (13(1) in this example), as described above, the

environment information on the image forming apparatus 13 is transmitted to the host server 16

via the client server 14 in response to a request by the client server 14 (S12-1).

The image forming apparatus management system 13 checks whether the image forming

apparatus 13 has received external parameters from the client server 14 (S12-2). In case that the

image forming apparatus 13 has received the external parameters (Yes at S12-2), the external

parameters are set to the print section 502 of the image forming apparatus 13 (for example, the

nip pressure of the skewed roll 82, ON/OFF of the air blower 125, parameters concerning

transfer voltage of the secondary transfer roll 50) (S12-3).

On the other hand, in case that the image forming apparatus 13 has not received the

external parameters (No at S12-2) and uses internal parameters (parameters in the internal

database) (Yes at S12-4), the internal parameters are set to the image forming apparatus (S12-5).

After that, the image forming apparatus 13 automatically starts the print job according

to the print job instruction transmitted from the client server 14 (S12-6). --